



MICA provides safety for explosion-hazardous areas!

Explosive atmospheres (Ex) in the workplace can be caused by flammable gases, mists or vapours or by combustible dusts. Explosions can cause loss of life and serious injuries as well as significant damage. In these areas there is a need for explosion proof safety lamps. From the very beginning safety lamps have been one of the major product lines in the MICA product family. Nowadays the rechargeable MICA range includes ATEX, IECEx, Immetro and GOST certified pocket-lamps, hand lamps and helmet lamps.

ML-800 ATEX

The MICA ML-800 is the market leader in rechargeable pocket-sized Ex-lamps. The shock resistant cover is manufactured completely from antistatic plastic and aluminium. The lens is three millimetres thick and specially hardened. The advanced electronics of ML-800 ATEX safety torch indicate the battery charge level with an easy-to-read LED-bar indicator. The ML-800 warns the user of low battery by flashing the light beam when there is 20 minutes of operating time left.

IL-800 and IL-80 ATEX

The extremely robust IL-800 and IL-80 Ex-handlamps are acknowledged as the leading products in the market in terms of durability, reliability and technology. The super tough body is essentially unbreakable as is the specially hardened glass lens. The most hazardous ZONE 0 areas are also covered by MICA IL lights. IL-lamps warn the user of low battery by flashing the light beam when there is 20-30 minutes of operating time left. IL-800 lights are available with special CRI-90+ LEDs.

HL-800 ATEX

MICA HL-800 ATEX head/helmet lamp makes hands free work possible in hazardous areas. The electronics protect the battery from deep discharge and warn the user of low charge by flashing the light beam 20-30 minutes before running down. The battery can be replaced in a few seconds and without the need to leave the hazardous area. Available as headband, helmet band and helmet clip-version.



MICA ML-800 1W
The extremely robust ATEX / GOST safety lamp with ultra-bright LED

Product number: 11550

Dimensions: 55 x 64 x 120
Weight: 370 grams

Lumens: 45 Lumens
Light source: 1W LED

Battery Duration (NiMH): 7 hours

Type of Protection: II 2GD
IP 66
Ex op is IIC T4
Ex ID 21 T130°C

Certification ATEX: VTT 04 ATEX 062X
Gas Zones: 1 and 2
Dust Zones: 21 and 22

Chargers: MICA MLC and MICA CR multi-station chargers.
Special versions: EM, Blink



MICA ML-800 3W
The extremely robust ATEX / GOST safety lamps with ultra-bright LED

Product number: 11560

Dimensions: 55 x 64 x 120
Weight: 370 grams

Lumens: 65 Lumens
Light source: 3W LED

Battery Duration (NiMH): 3 hours

Type of Protection: II 2GD
IP 66
Ex op is IIC T4
Ex ID 21 T130°C

Certification ATEX: VTT 04 ATEX 062X
Gas Zones: 1 and 2
Dust Zones: 21 and 22

Chargers: MICA MLC and MICA CR multi-station chargers.
Special versions: EM, Blink



ZONE 0

MICA IL-800 ZONE 0
ATEX / IECEx / GOST safety lamp with three ultra-bright LEDs

Product number: 13800

Dimensions: 215 x 120 x 120
Weight: 1100 grams

Lumens: High 200 Lumens
Low 80 Lumens
Light source: 3 x Ultra-bright LED

Battery Duration with NiMH Battery: •High power 6 hours
•Low power 12 hours

Type of Protection: II 1G Ex ia IIC T4 Ga
II 2D Ex tb IIIC 100°C
IP67 Db

Certification ATEX: TÜV 10 ATEX 7878
IECEx: IECEx TUR 11.0008
Gas Zones: 0, 1 and 2
Dust Zones: 21 and 22

Chargers: MICA ILC-4 and MICA CR multi-station chargers.
Special versions: EM, CRI-90+, Blink



MICA IL-800 ZONE 1
ATEX / IECEx / GOST safety lamps with three ultra-bright LEDs

Product number: 13810

Dimensions: 215 x 120 x 120
Weight: 1100 grams

Lumens: High 200 Lumens
Low 80 Lumens
Light source: 3 x Ultra-bright LED

Battery Duration with NiMH Battery: •High power 6 hours
•Low power 12 hours

Type of Protection: II 2G Ex Ib IIC T4 Gb
II 2D Ex tb IIIC 100°C
IP67 Db

Certification ATEX: TÜV 10 ATEX 7879
IECEx: IECEx TUR 11.0009
Gas Zones: 1 and 2
Dust Zones: 21 and 22

Chargers: MICA ILC-4 and MICA CR multistation chargers.
Special versions: EM, CRI-90+, Blink



MICA IL-80 ATEX LED
ATEX / GOST certified safety lamp with one ultra-bright LED.

Product numbers: ATEX model 11180_1
GOST model 11195_1

Dimensions: 215 x 120 x 120
Weight: 1100 grams

Lumens: High 60 Lumens
Low 30 Lumens
Light source: Ultra-bright LED

Battery Duration with NiMH Battery: •High power 10h 30min
•Low power 21 hours

Type of Protection: II 2 G D Ex eib IIC T4
Certification ATEX: VTT 03 ATEX 027X
Gas Zones: 1 and 2
Dust Zones: 21 and 22

Ingress Protection: IP 66

Chargers: MICA ILC-4 and MICA CR multi-station chargers.
Special versions: EM



Helmetband version

MICA HL-800
ATEX / GOST certified helmet lamp to Ex-areas.

Product numbers: ATEX model 11641
GOST model 11646

Weight: Lamp 37,5 grams
Battery 137 grams
Total weight: 512 grams

Lumens: from main beam (2,4W halogen bulb): 36 Lumens
Secondary bulb: White LED 8 000mCd

Battery Duration (NiMH): Main beam: 3h 10min
LED: 2 days

Type of Protection: Ex eib op is IIC T3
Ex I IEC 62013-1 M2

Certification ATEX: VTT 02 ATEX 013X
Gas Zones: 1 and 2
Ingress Protection: IP 66

Chargers: MICA HC-41, HC-42 and MICA CR multi-station chargers.



ML-800



IL-800



HL-800



Headband version



See all colours with MICA IL-800 CRI-90+

Colour rendering indicates how a light source makes colour appear to human eyes and how well slight variations in colour shades are revealed. The CRI scale indicates how accurate a light source is at rendering colour when compared to daylight. MICA CRI-90+ models have a minimum of CRI 90, which is considered to be excellent for tasks requiring accurate colour discrimination.



Handlamps with EM function
Emergency lighting is often forgotten until an accident happens. During a power failure, a MICA lamp with EM function will light up and provide light for the area in front of it. The lamp automatically turns off when returned to the charger and/or the power returns. In addition to this special function, MICA EM lights can be used normally as a professional flashlight.

MICA lamps are designed and manufactured in Finland by Mica Elektro Oy Ltd

MICA HL-800 ATEX**I M2
II 2G****Ex I IEC 62013-1
Ex eib op is IIC T4**

Certificate: VTT 02 ATEX 013 X

The design and manufacture of the lamp is compliant to European standards CENELEC EN 60079-0 (2006), EN 60079-7 (2007), EN 60079-11 (2007), EN 60079-28 (2007), EN 62013-1 (2006).

MICA HL-800 ATEX SAFETY INSTRUCTIONS**Before use:**

- All preparations (including cleaning) must always perform before entering inside potentially explosive environments. The charger (MICA HC-41 or MICA-42) must be mounted outside the potentially explosive atmosphere. Charging the lamp battery inside potentially explosive environments is prohibited.

Use:

- HB-800 battery is the only allowable power source for MICA HL-800 ATEX lamp.
- HB-800 battery may not be charged in an EX hazardous area.
- HB-800 battery may be charged with MICA HC-41 or MICA HC-42 charger only.
- HB-800 battery may be changed inside an EX hazardous area.
- Check that your MICA HL-800 ATEX lamp is certified for use in your work location
- Make sure that lamps' s protection class is sufficient to environment where lamp is used.

Maintenance:

- Do not open the reflector housing (secured with a allen socket screw) inside an EX-hazardous area.
- User-serviceable parts are limited to those listed in the spare part list.
- Under no circumstances do not attempt to service or change the electronics unit.
- In case of malfunction, read the User's Manual and contact your MICA distributor.

WARRANTY

Your MICA lamp, battery and charger are guaranteed for one year from date of purchase against all defects in materials and workmanship. During the warranty period, these units may be serviced by an authorized MICA service agent only. For after-sales service, contact your local MICA dealer.

For more information on Mica Elektro or the product lines, please visit our internet website:

www.mica.eu

EC DECLARATION OF CONFIRMITY

We hereby declare that the product described below has been designed and manufactured in accordance with the following standards/directives:

- Directive 94/9/EC Equipment (ATEX) for use in potentially explosive atmospheres
- EMC directive 89/336/EC

Manufacturer:	MICA ELEKTRO OY LTD. Höyläämötie 11 A FIN-00380 HELSINKI, Finland phone: +358-9-561 7666 fax: +358-9-561 76688 email: info@mica.eu www.mica.eu
Product name, model, serial number, year of manufacture:	Mica Halogen HL-800 ATEX Serial number (in eight digits) and year of manufacture marked on the ID tag.
Certificate number:	VTT 02 ATEX 013X
Product type:	Rechargeable head/helmet lamp

Helsinki, Jan. 30, 2009


Ake Smolander, Managing director
MICA ELEKTRO OY LTD.

—mica—halogen—®

HL-800 ATEX USER'S GUIDE



Please read this user's guide carefully and store it for future, since proper handling will prolong the useful life of your MICA lamp.



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—mica—
e-l-e-k-t-r-o

LAMP USE

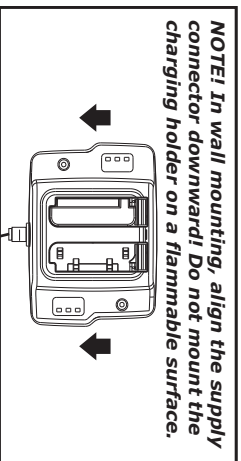
Before use check that the battery is fully charged and connected to the lamp. The rotary knob on the right side of the lamp functions as a switch (secondary LED / Main beam / OFF). The beam angle can be adjusted by the rotary knob on the left side of the lamp. In the HL series lamps, blinking of the beam at 15 s intervals indicates low battery. At the start of blinking the bulb, about 10 min of operating time remains. After that, the control electronics will automatically turn off the lamp to prevent battery deep-discharge. When necessary, adjust the beam angle (see Bulb change).

VERSIONS

The HL-800 series is manufactured in three versions: a headband model, a helmetband model (a special design affixed on a helmet with rubber bands and plastic hooks) and a helmet clip model. Main beam is 1W LED bulb or 2.4W Halogen bulb. When ordering spare parts, pay attention to specify a correct lamp version.

A table/wall-mounted charging holder is available in

two versions: type HC-41 (single-battery version) or HC-42 (two-battery version).

**BATTERY CARE**

For long life, the battery must be charged fully prior to its first use, as well as after a full discharge. A new battery needs about 10 full charge/discharge cycles to gain its full capacity. Charging within an explosion hazard space is absolutely forbidden! The HB-800 battery must always be charged in an original HC-41/42 charging holder.

BATTERY CHARGING

The charging holder can be used at an operating temperature of +5°C ... +40°C. The fast-charging current is about 650mA. It can be supplied from the mains using either the MICA IL-2, MICA IL-10, MICA CR or the vehicle battery (supply voltage of 12...30VDC). Fast-charging a fully exhausted HB-800 battery takes less than two hours. **NOTE!** The supply voltage to the charging holder may not be interrupted by a timer or similar device.

NOTE! After use in the lamp, the battery should always be stored in its charging holder.

The charging holder has a quick-disconnect for supply voltage input. When the green LED indicator is on, the supply voltage to the battery charging holder is properly connected. If there is no battery in the charging holder and the yellow LED indicator is on, the supply voltage is too low.

The intelligent control circuit of the HC-41/42 starts the charge cycle by a battery condition analysis. Based thereon, the control circuit optimizes the charging parameters to bring the battery to the correct temperature (+5°C ... +40°C) and voltage. If the battery temperature is under +5°C or over +40°C or the battery has been exhausted down to a deep-discharge, charging will begin at a low trickle charge current (red LED turns on) until the battery is ready for fast charge (yellow LED turns on). When charging at full current is completed, the charger will automatically switch to trickle charging (green LED turns on). If the battery temperature rises excessively during charging, the charger will stop charging (red LED turns on) until the battery temperature falls sufficiently.

If the battery is defective or overheated, charging will be interrupted and the red LED remains lit even when the battery is removed from the charging holder. Prior to the next charging cycle, the charging holder must be reset by disconnecting the supply voltage (see legend of LED indications).

BULB CHANGE (1W LED or 2.4W Halogen)

Use only spare parts supplied by MICA as a replacement. First unscrew the locking screw of the lamp collar ring (with a 2.5mm Allen key). Remove the glass lens, rubber seal and reflector. Open the bulb/1W LED locking ring using a 11mm wrench tool. Change the bulb and tighten in place with the locking ring. Adjust the beam angle by turning the locking ring clockwise and check with the reflector until the beam pattern is as desired. When changing the bulb or reflector, avoid scratching them and immediately wipe away any stains using tissue paper and spirits. The secondary LED lamp may be replaced only by an authorized MICA service agent.

Operating times:

With 1W LED bulb is 7h and with 2.4W Halogen 3h 10min.

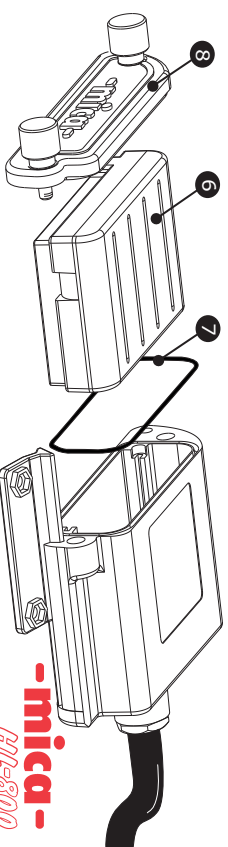
Using the secondary LED lamp only, the operating time is over 1 day.

Legend of LED indications on HC-41/42 charger

Green LED	Power on (without battery)
Green LED	100% charged (battery inserted)
Yellow LED	Too low input voltage (without battery)
Yellow LED	Fast charging (battery inserted)
Yellow LED	Charging parameters off limits (battery inserted)
Red LED	Remains lit (even after battery removal) for a defective or excessively heated battery. To reset the control circuit, disconnect supply voltage temporarily.

NOTE!

Servicing of MICA HL-800 by the user is limited to the operations described above and may cover only the change of the spare parts listed under the drawing.

**SPARE PARTS FOR HL-800 ATEX LAMP:**

- H0032_1 Halogen Bulb (2.4W)
- H0032_5 1W LED Bulb
- H0033_1 Bulb locking ring
- H0035_2 Reflector with oval ring
- H0044_1 Rubber band set (headband)
- H0044_2 Rubber band set (helmetband)
- H0047_1 Plastic hooks for helmetband
- H0046_4 Clamp frame and helmetband
- H0046_5 Clamp frame and headband
- H0046_6 Clamp frame and helmet
- H0040_1 clip-set
- H0060_1 Lens and seal
- H0066_1 HB-800 Spare battery
- H0061_1 O-ring for battery case
- H0065_2 Cover assembly
- H0031_2 Locking ring & locking screw
- H0036_2 Switch and adjustment assemblies

SPARE PARTS FOR HC-41/42 CHARGER

- H0021_1 Casing and adhesive tapes
- H0022_1 Cable set with connector
- H0023_1 Bottom plate
- H0024_1 Printed circuit board (PCB)
- H0025_1 PCB mounting posts (8 pcs.)
- H0026_1 Set of screws

TECHNICAL SPECIFICATIONS**HL-800 LAMP**

Operating temperature:	-20°C ... +40°C
Protection class:	IP 66
Weight:	510g
Bulb:	(lamp 375g + battery 135g) 6V / 2.4W halogen (Px13.5) 6V / 1W LED (Px13.5)

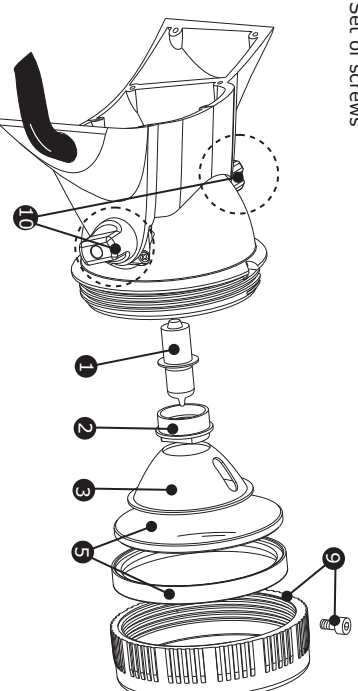
HB-800 BATTERY (spare)

Type:	NiMH battery
Capacity:	1350mAh
Voltage:	6V
Weight:	135g

HC-41/42 CHARGING UNIT

Operating temperature:	+5°C ... +40°C
Input voltage:	12...30VDC
Charging current:	650mA automatically controlled
Protection class:	IP 20
Dimensions:	152mm x 115mm x 60mm

NOTE! When ordering spare parts please always tell the model/type and serial number of your lamp and/or charger.

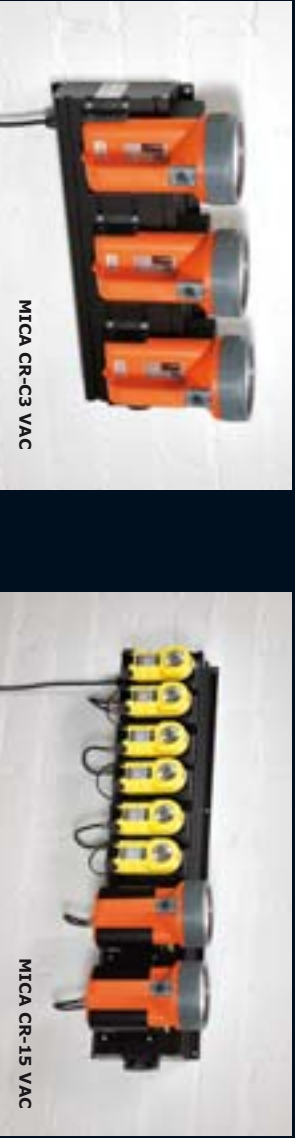


Intelligent MICA chargers for IL-lamps

MICA ILC-VAC & ILC chargers keep the lamp ready for use and will not overcharge the battery. The aluminum construction and tight fit will keep the lamp secure in rough conditions. Lamps can be stored in their chargers.

MICA VAC chargers are fed directly from the mains (85...264VAC). Other models can be connected directly into a vehicle battery (12...24VDC) or to the mains with an IL-2 adapter. The MICA charger range also includes VAC/VDC chargers that can be fed from a vehicle battery and/or the mains and it changes input automatically.

With multi-station MICA CR charger racks, you can fit your lamp/battery charger bay into a more compact space with minimum installation time. Ask for further information about other MICA Charging systems!



MICA IL SERIES



MICA
STRONGEST
IN THE MARKET



Bright tools for professionals since 1983

MICA lamps are designed and manufactured in Finland by Mica Elektro Oy Ltd. The company is one of the leading rechargeable light manufacturers in Europe. Every day hundreds of thousands MICA flashlights are used by top professionals around the world. Only the best quality components that meet European standards are approved for use in MICA products. Production quality is guaranteed by our ISO 9001:2008 certificate.



Mica Elektro Oy Ltd. tel:+358-9-561 7666 fax:+358-9-561 76688 www.mica.eu

MICA IL series -when second best is not an option!

The extremely robust IL-series handlamps are acknowledged as the leading product in the market in terms of durability, reliability and technology. The super tough nylon body is basically unbreakable and it also boasts a special hardened glass lens. With the wide selection of battery types, different light sources and other special functions, it is easy to combine a perfect MICA set to all applications. The IL series is developed together with professional users around the world, and it will not let you down when you need it most.

MICA offers a wide range of ATEX / IECEx -certified safety lamps from pocket-sized torches to lanterns and helmetlamps. The most hazardous ZONE 0 areas are also covered by rechargeable MICA lights. MICA Ex-lamps are extremely powerful with a long operating time. Certificates from: TÜV, VTT, Immetro and Gost-Ex.

See all colours with MICA CRI-90+ LEDs!

Colour rendering indicates how a light source makes colour appear to human eyes and how well slight variations in colour shades are revealed. The CRI scale indicates how accurate a light source is at rendering colour when compared to daylight. MICA CRI-90+ models have a minimum of CRI-90, which is considered to be excellent for tasks requiring accurate colour discrimination.

Handlamps with EM function

Emergency lighting is often forgotten until an accident happens. During a power failure, a MICA lamp with EM function will light up and provide light for the area in front of it. The lamp automatically turns off when returned to the charger and/or the power returns. In addition to this special function, MICA EM lights can be used normally as a professional flashlight.



MICA IL-6000 GT
The true light cannon with extra boost power mode.

Product number:
NIMH battery model 13750
NiCd battery model 13760

Dimensions:
215 x 120 x 120
Weight:
1600 grams

Lumens: High 700 Lumens
With super boost +50%!
Low 120 Lumens
Light source:
3 x Ultra-bright LED

Battery Duration with
NIMH Battery:
•High power 5 Hours
•Low power 24 Hours

Ingress Protection:
IP 66
Other colours:
Black and MIL green

Boost power stays on for as long the switch is held down. Large aluminum ring helps to cool extra heat.

Chargers:
MICA IIC-3 and MICA CR multi-station chargers.
Special versions:
EM, CRI-90+



MICA IL-600
The extremely robust all-round lamp with three ultra-bright LED.

Product number:NIMH battery model 13700
NiCd battery model 13710

Dimensions:
215 x 120 x 120
Weight:
1400 grams

Lumens:
High 500 Lumens
Low 120 Lumens
Light source:
3 x Ultra-bright LED

Battery Duration with
NIMH Battery:
•High power 8 Hours
•Low power 24 Hours

Ingress Protection:
IP 66/67
Other colours:
Black and MIL green

Wide range of different accessories.

Chargers:
MICA IIC-3 and MICA CR multi-station chargers.
Special versions:
EM, CRI-90+



MICA IL-60 LED
The new version of IL-60 with LED-power and long operating time.

Product number:NIMH battery model 11400
NiCd battery model 11401

Dimensions:
215 x 120 x 120
Weight:
1400 grams

Lumens:
High 120 Lumens
Low 60 Lumens
Light source:
Ultra-bright LED

Battery Duration with
NIMH Battery:
•High power 24 Hours
•Low power 48 Hours

Ingress Protection:
IP 66/67
Other colours:
Black and MIL green

Wide range of different reflectors and other accessories.

Chargers:
MICA IIC-3 and MICA CR multi-station chargers.
Special versions:
EM



MICA IL-60 Halogen
Hundreds of thousands of Halogen lamps are in use daily around the world.

Product number:NIMH battery model 11281
NiCd battery model 11240

Dimensions:
215 x 120 x 120
Weight:
1400 grams

Lumens:
Up to 550 Lumens
Light source: 6W, 10W, 20W or 30W Halogen

Battery Duration with
NIMH Battery:
•High power 5 Hours
•Low power 8 Hours

Ingress Protection:
IP 66/67
Other colours:
Black and red

Wide range of different bulbs, reflectors and Infra-Red and UV-lenses and other accessories.

Chargers:
MICA IIC-3 and MICA CR multi-station chargers.
Special versions:
EM



MICA IL-61
Special signalling lamp for railway use.

Product number:
NIMH battery model 11342

Dimensions:
215 x 120 x 120
Weight:
1400 grams

Lumens:
120 Lumens
Light source:
6W Halogen and 12 red power LED

Battery Duration with
NIMH Battery:
•High power 8 Hours
•Low power 12 Hours

Ingress Protection:
IP 65
Other colours:
Red

Normal or square light beam. Red signalling light-unit operated by a separate switch.

Chargers:
MICA IIC-3 and MICA CR multi-station chargers.



MICA IL-60 SRC
Powerful searchlight for sea rescue use.

Product number:
NiCd battery model 11249

Dimensions:
215 x 120 x 120
Weight:
1400 grams

Lumens:
Up to 550 Lumens
Light source: 6W, 10W, 20W or 30W Halogen

Battery Duration with
NIMH Battery:
•High power 5 Hours
•Low power 8 Hours

Ingress Protection:
IP 66/67

Floats when dropped in water. EM function as a standard.

Chargers:
MICA IIC-3 and MICA CR multi-station chargers.



MICA IL-60 MIL
The extremely robust handlamp for military, police & border control use.

Product number:
NIMH battery model 11280
NiCd battery model 11287

Dimensions:
215 x 120 x 120
Weight:
1400 grams

Lumens:
Up to 550 Lumens
Light source:
10W, 20W or 30W Halogen

Battery Duration with
NIMH Battery:
•High power 2h 30min
•Half power 4 hours

Ingress Protection:
IP 66/67

IL-60 MIL Equipped with special infra-red filter (850nm).
NIMH battery 11285_1
NiCd battery 11285

Chargers:
MICA IIC-3 and MICA CR multi-station chargers.



ZONE 0



MICA IL-800 ZONE 0
ATEX / IECEx / GOST safety lamp with three ultra-bright LEDs

Product number:
13800

Dimensions:
215 x 120 x 120
Weight:
1100 grams

Lumens:
High 200 Lumens
Low 80 Lumens
Light source:
3 x Ultra-bright LED

Battery Duration with
NIMH Battery:
•High power 6 hours
•Low power 12 hours

Type of Protection:
II 1G Ex ia IIC T4 Ga
II 2D Ex tb IIIC 100°C
IP67 Db
Certification
ATEX:
TÜV 10 ATEX 7878
IECEx:
IECEx TUR 11.0008
IECEx TUR 11.0009

Gas Zones: 0, 1 and 2
Dust Zones: 21 and 22

Chargers:
MICA IIC-4 and MICA CR multi-station chargers.
Special versions:
EM, CRI-90+, Blink



MICA IL-800 ZONE 1
ATEX / IECEx / GOST safety lamps with three ultra-bright LEDs

Product number:
13810

Dimensions:
215 x 120 x 120
Weight:
1100 grams

Lumens:
High 200 Lumens
Low 80 Lumens
Light source:
3 x Ultra-bright LED

Battery Duration with
NIMH Battery:
•High power 6 hours
•Low power 12 hours

Type of Protection:
II 2G Ex Ib IIC T4 Gb
II 2D Ex tb IIIC 100°C
IP67 Db
Certification
ATEX:
TÜV 10 ATEX 7879
IECEx:
IECEx TUR 11.0009

Gas Zones: 1 and 2
Dust Zones: 21 and 22

Chargers:
MICA IIC-4 and MICA CR multi-station chargers.
Special versions:
EM, CRI-90+, Blink



MICA IL-80 ATEX LED
ATEX / GOST certified safety lamp with one ultra-bright LED.

Product numbers:
ATEX model 11180_1
GOST model 11195_1

Dimensions:
215 x 120 x 120
Weight:
1100 grams

Lumens:
High 60 Lumens
Low 30 Lumens
Light source:
Ultra-bright LED

Battery Duration with
NIMH Battery:
•High power 10h 30min
•Low power 21 hours

Type of Protection:
II 2 G D Ex elb IIC T4
II 2D Ex tb IIIC 100°C
Certification
ATEX:
VTT 03 ATEX 027X

Gas Zones: 1 and 2
Dust Zones: 21 and 22
Ingress Protection:
IP 66

Chargers:
MICA IIC-4 and MICA CR multi-station chargers.
Special versions:
EM



Details and Accessories



MICA lamps are designed and manufactured in Finland by Mica Elektro Oy Ltd

ZONE 2

- mica -

IL-70 ATEX LED 

Ultra-bright 120-lumen LED bulb • Up to 28 hours operation time on a full battery • Shockproof & conductive IP 67 housing • Single switch control for two power modes • Low-battery warning function • Easy charger installation on firetruck and other vehicles (12...24VDC)



Strongest on the market. MICA IL-70 ATEX LED

MICA IL-70 ATEX LED is a cost-effective general-purpose handlamp for use in ZONE 2 rated Ex-areas. With its extremely long 28-hour operation time there is no need to constantly worry about recharging the battery. Total robustness, ultra-bright LED and long life span ensure that MICA IL-70 fills all the requirements of fire & rescue services and other demanding types of professional use.

The intelligent MICA ILC4 charger has an aluminium construction and is ideally suited for use with the IL-70 ATEX LED. ILC4 is specially designed for easy vehicle installations (12...24V).

Designed and manufactured in Finland www.mica.eu

IL-70 ATEX LED



Rechargeable flashlight for Zone 2 areas

MICA IL-70 ATEX LED For ZONE 2

Tempered glass lens (5mm thick)

Single switch control for two power modes

Ergonomic handle with room for gloves

Intermittent blinking signals low battery

120-lumen Ultra-Bright L500N LED

Waterproof (IP67) lamp floats and illuminates upwards if dropped in water



Optional normal or spot beam with aluminium reflectors

Shockproof and truly conductive body



MICA IL-70 ATEX LED is a rugged, high-performance Category 3 flashlight for Zone 2 explosion-hazardous areas. With its ergonomic dual-mode switch the user can choose between a 28h operating time and two light output modes. The shape of the light beam can be easily altered with two different reflector models.

The advanced electronics of the flashlight control the power mode, prevent deep-discharge of the battery and indicate the need for recharging. When the remaining operating time is approx. 15-30 minutes the beam starts to blink at 15-second intervals.

The dependable NiCd battery and shock-proof construction have proven to be reliable in both temperature extremes. The construction of the MICA IL-70 ATEX LED is designed for easy servicing. Its extremely long lifespan guarantees high costeffectiveness. The end-user can easily perform battery changes and most services.

MICA IL-70 ATEX LED lamps comply with the requirements of the following European standards: EN 60079-0, EN 60079-11, EN 60079-28 and EN 60079-31.

MICA ILC4 Chargers

Vehicle or indoor installations (IP44)
Rugged aluminum construction

LED indicators for state-of-charge
Charging temperature 0...+40°C

e17



MICA ILC4
(Nominal input 12...24VDC)



MICA ILC4 VAC
(Nominal input 85...264VAC)

Advanced MICA ILC4 and ILC4-VAC chargers keep MICA IL-70 ATEX LED lamps ready for use at all times and do not overcharge the battery during storage. The ILC4 has wide operating range and it recharges IL-lamps fully in 0°C...40°C ambient temperatures. The tight fit will keep the lamp secure even in rough vehicle use.

The MICA ILC4-VAC chargers are fed from mains (85...264VAC). Other models can be connected directly into a vehicle battery or to the mains with an MICA IL-2 adapter.

The MICA Charger family includes various multichargers and special models for trains, offshore, firetrucks, marine etc.

Technical information MICA IL-70 ATEX LED:

Classification:



II 3G Ex ic IIC T4 Gc
II 3D Ex tc IIIC T135°C Dc

Area of Classification GAS:

Zone 2

Area of Classification DUST:

Zone 22

IP Rating:

IP67

Light Source:

MICA L500N LED

Battery:

6V NiCd

Operating Time:

Full power 14h / Low power 28h

Operating Temperature:

-20°C...+40°C

Weight:

1.3kg

MICA Product Range

Bright tools for professionals since 1983

MICA lamps are designed and manufactured in Finland by Mica Elektro Oy Ltd. Only the best quality components that meet European standards are approved for use in MICA products. Production quality is guaranteed by our ISO 9001:2008 certification.

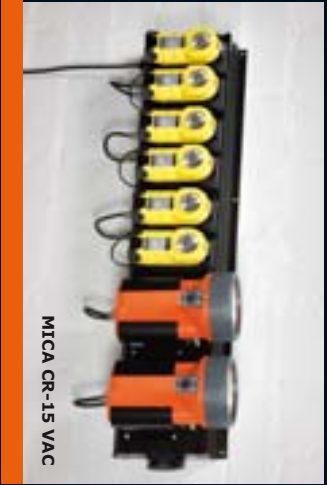
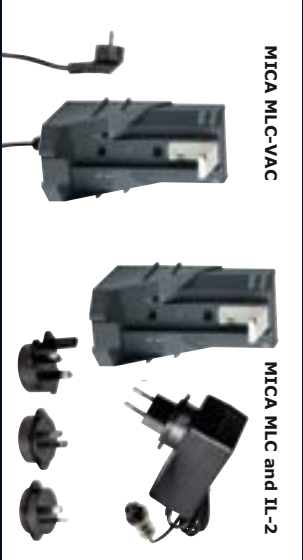


- mica -
elektro

MICA Fast Chargers for ML lamps

Intelligent MICA MLC fast chargers will recharge a depleted battery in less than three hours. MLC can be fed either directly from 12...24VDC vehicle battery or from the mains 85... 265VAC using a MICA IL-2 AC/DC adapter. MICA MLC-VAC may be connected directly to the mains. The tight locking clip will keep the lamp firmly in the charger. The MICA MLC charger ensure the lamp is kept ready for use and will not overcharge the battery. You can install up to ten MLC chargers into the CR-15 charger holder rack. With the compact MICA CR-track charger installation is quick and hassle-free!

Ask for further information about other MICA Charging systems!



MICA ML SERIES



Bright tools for professionals since 1983

MICA lamps are designed and manufactured in Finland by Mica Elektro Oy Ltd. The company is one of the leading rechargeable light manufacturers in Europe. Every day hundreds of thousands MICA flashlights are used by top professionals around the world. Only the best quality components that meet European standards are approved for use in MICA products. Production quality is guaranteed by our ISO 9001:2008 certificate.



MICA ML series

Mica ML lamps are robust and compact handlamps for every-day professional use. The entire range is rechargeable, easy-to-use and maintain. NiMH battery pack gives up to 8 hours of continuous operating time. Advanced electronics prevent deep discharge of the battery and indicate low battery charge. ML-series lamps warn the user of low battery charge by flashing the light beam when there is 15-20 minutes of operating time left.

ML-600 Series

In addition to the main High-Power LED, the ML-601 incorporates twelve red LEDs with a separate switch for signalling purposes and the ML-602 features six red and six green LEDs, with separate switches for controlling the lamp. The signalling matrix is visible over distance of more than 1.5 kilometres. The housing is splash proof and is equipped with steel belt clip. Also available with ML-green body and with UV- or IR-LEDs. All ML-600 series lamps are equipped with an Emergency Lighting function (EM).



ML-800 ATEX Series

MICA offers range of pocket-sized ATEX / GOST -certified safety lamps. ML-800 is the market leader in small rechargeable Ex-lamps. The shock resistant cover is manufactured completely from antistatic plastic and aluminum, its enclosure class is IP 66 and it is equipped with steel belt clip. The advanced electronics of the ML-800 ATEX indicate low battery charge with an easy-to-read LED-bar indicator. Available with 1W or 3W LEDs and with the Emergency Lighting function (EM).



MICA lamps are designed and manufactured in Finland by Mica Elektro Oy Ltd



MICA ML-600
Pocket-size lamp for professional use with ultra-bright LED power.
Product number: 11520_1

MICA ML-601
Pocket-size signalling lamp for railway use. Ultra-bright LED and extremely powerful red signalling unit.
Product number: 11521_1

MICA ML-601 DB
Specially tailored for Europe's biggest railway operator.
Product number: 11523_1

MICA ML-602
Pocket-size signalling lamp for railway use. Ultra-bright LED and two signalling units (red/green).
Product number: 11522_1

MICA ML-601 UV375
Inspection lamp with ultra-bright LED and 12 powerful UV-375nm LEDs. For checking ID cards, passports and other documents in daylight.
Product number: 11521_3

MICA ML-602 UV375/IR850
Inspection lamp with ultra-bright LED and 6 UV-375nm LEDs and 6 IR-850nm LEDs.
Product number: 11522_4

MICA ML-800 1W
The extremely robust ATEX / GOST safety lamp with ultra-bright LED
Product number: 11550

MICA ML-800 3W
The extremely robust ATEX / GOST safety lamps with ultra-bright LED
Product number: 11560

Dimensions: 57 x 64 x 122
Weight: 315 grams

Dimensions: 57 x 64 x 122
Weight: 275 grams

Dimensions: 57 x 64 x 122
Weight: 275 grams

Dimensions: 57 x 64 x 122
Weight: 275 grams

Dimensions: 57 x 64 x 122
Weight: 275 grams

Dimensions: 57 x 64 x 122
Weight: 275 grams

Dimensions: 55 x 64 x 120
Weight: 370 grams

Dimensions: 55 x 64 x 120
Weight: 370 grams

Lumens: 40.5 Lumens
Light source: Ultra-bright LED

Lumens: 40.5 Lumens
Light source: Ultra-bright LED

Lumens: 40.5 Lumens
Light source: Ultra-bright LED

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Light source: Ultra-bright LED

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Light source: Ultra-bright LED

Lumens: 40.5 Lumens
Light source: Ultra-bright LED

Lumens: 45 Lumens
Light source: 1W LED

Lumens: 65 Lumens
Light source: 3W LED

Battery Duration with 1800mAh NiMH battery: 8 hours

Battery Duration with 1350mAh NiMH battery: 6 hours

Battery Duration with 1350mAh NiMH battery: 6 hours

Battery Duration with 1350mAh NiMH battery: 6 hours

Battery Duration with 1350mAh NiMH battery: 6 hours

Battery Duration with 1350mAh NiMH battery: 6 hours

Battery Duration (NiMH): 7 hours

Battery Duration (NiMH): 3 hours

Ingress Protection: IP 54
Other colours: Green

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Ingress Protection: IP 54

Ingress Protection: IP 54

Type of Protection: II 2GD
Ex op is IIC T4
Ex id 21 T130°C

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Ex op is IIC T4
Ex id 21 T130°C

All ML-600/601/602 lamps include: Steel belt clip, wrist strap, EM function and stepless dimmer. Accessories: colour filters, diffuser, halogen bulb

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Certification ATEX: VTT 04 ATEX 062X
Gas Zones: 1 and 2
Dust Zones: 21 and 22

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Gas Zones: 1 and 2
Dust Zones: 21 and 22

Chargers: MICA MLC and MICA CR multi-station chargers.

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Chargers: MICA MLC and MICA CR multi-station chargers. Special versions: EM, Blink

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